

New small laser module with digital modulation, optic head

ZM12DM5



Features:

- TTL Modulation up to 100kHz
- Integrated cable for 4-6VDC operation with reverse polarity protection
- Optical power up to 40mW / 100mW IR
- Red and infrared wavelengths available
- Simple, external hand focusing mechanism
- Compact M12 thread for various installations and mountings
- Over voltage protection with surge/spike protection
- Potential-free housing for trouble-free installation

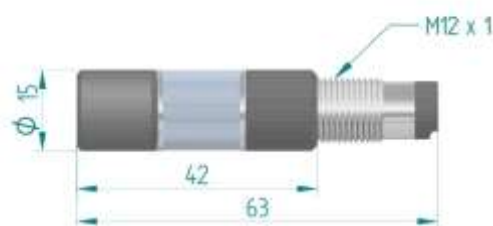
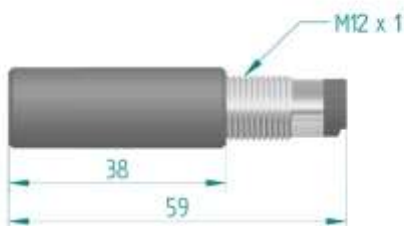
Applications:

- Positioning
- Machine Vision
- Wood processing
- Metal processing
- Textile industry
- Stone processing
- Food industry
- Medical science
- Automotive industry

Techn. Drawing:

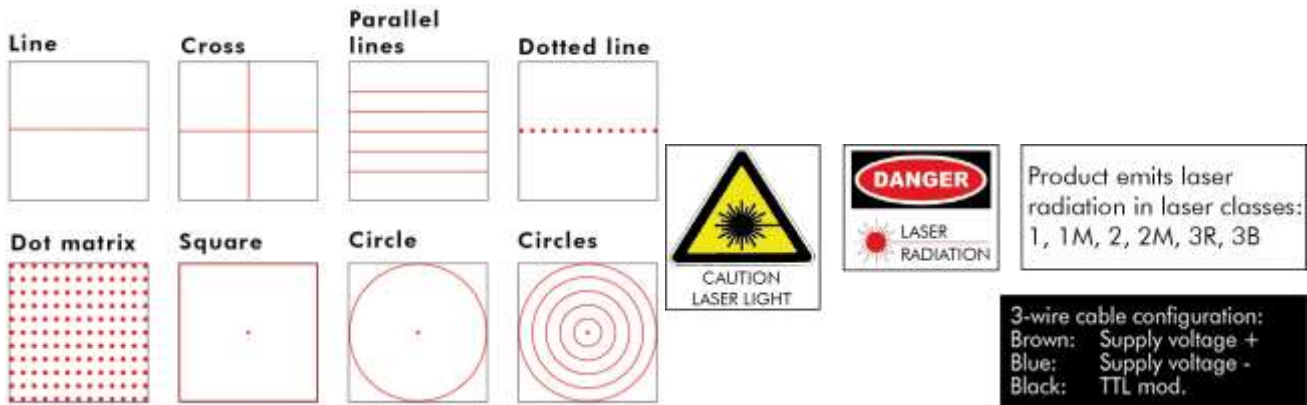
Fixed focus version

Focusable version



Some available Optics:





Special Mountings: H8-M12

Optical

Optical power stability	$\pm 3\%$ over operating temperature rang
Wavelength vs. temperature	Typ. 0,20 - 0,30nm / °C depending on wavelength
Range of focus	100mm up to 10m
Boresight	$< \pm 10\text{mrad}$
Pointing stability	$< 10\mu\text{rad} / ^\circ\text{C}$

Optics (on request)

Line (Gaussian profil)	90°, symmetrical
Line (homogeneous intensity profile)	10°, 20°, 30°, 40°, 45°, 60°
Point	elliptical
DOE	see examples

Standard wavelngths and power (other on request)

635nm, 640nm, 643nm, 660nm, 785nm, 830nm, 850nm	up to 100mW depending on wavelngths
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Electrical

Supply voltage	4-6VDC
Mode of operation	APC with current limiting
Modulation	TTL up to 100kHz
Protection	reverse polarity and transient protection / ESD
Connection	2000mm cable, 3-wire

Mechanical

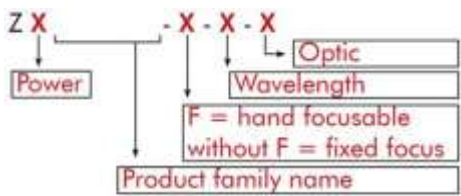
Dimensions	63mm x Ø 15mm (focusable version)
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Housing	Laser: M12 industry housing, chromed brass Optic head: anodised aluminium
Protection category	IP 67
Electrical isolation	potential-free housing

Environmental conditions	
Case temperature	-10°C up to +50°C (heat dissipation e.g. with mounting H8-M12)
Storage temperature	-10°C up to +70°C
Humidity	Max. 90%, non condensing
MTTF at 25°C	> 30.000h (635-643nm)

Order code:



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M12DM5

